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EXAMINER

THERIAULT, STEVEN B

ART UNIT	PAPER NUMBER
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2179

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/637,433	Applicant(s) ALDRICH, WILLIAM J.	
	Examiner STEVEN B. THERIAULT	Art Unit 2179	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. This action is responsive to the following communications: amendment filed 08/14/2008.

This action is made Final.

2. Claims 1–5, 7-23 are pending in the case. Claims 1, 12, and 23 are the independent claims.
Claims 6 and 24 has been cancelled.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-5, 7-11 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The first process in 101 examinations is to determine whether a claim recited eligible subject matter and falls within one of the four classes of invention. Claims 1-5, 7-11 reflect process claims but a process must (1) be tied to another statutory class (such as a particular apparatus) or (2) transform the underlying subject matter to a different state or thing *In re Bilski*. In this case, the claims clearly do not recite a process of transformation and the claims do not tie the process to another statutory class by reciting an apparatus (See also *Diamond v. Diehr*, 450 U.S. 175, *Parker v. Flook*, 437 U.S. 584, *Gottschalk v. Benson*, 409 U.S. 63 and *Cochrane v. Deener*, 94 U.S. 780). Therefore, the claims are rejected under the first test under 35 U.S.C 101 examination because the claims do not fall into one of the four classes of invention.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. **Claims 1-5, 7- 23 are rejected under 35 U.S.C. 103(a) as obvious over Belcsak et al (hereinafter Belcsak) US. Patent no. 6,957,191 issued Oct. 18, 2005 and filed Sept. 14, 2000, in view of Shaughnessy et al. (hereinafter Shaughnessy) U.S. Patent No. 7015911 issued March 31, 2003.**

In regard to **Independent claim 1**, Belcsak teaches a method comprising:

- Performing an analysis or synthesis operation on a graphical model representation that includes at least one graphical object (See column 2, 55-67 and column 3, lines 1-35).
Belcsak teaches a process of performing an analysis on a graphical model. Belcsak teaches that the graphical representation includes at least one graphical object (See figure 14 and column 9, lines 40-50). A graphical box that is dragged by the user is a graphical object.
- Producing a report from the analysis or synthesis operation (column 3, lines 12-15 and column 7, lines 60-67 and column 16, lines 16-50). Belcsak teaches producing a report from the analysis of the model. Belcsak teaches generating formulas, objects, templates, timelines, calculations, constraints, or **any other** suitable information for modeling a scenario, which can be considered a report. Belcsak specifically teaches generating a report (See column 7, bottom).
- Receiving a selection of the graphical object in the graphical model representation (See column 9, lines 50-67 and column 3, lines 15-35, a user modifies scenario or double clicks in

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receiving a selection); displaying the one or more portions of the produced report corresponding to the selected graphical object in response to the selection. Belcsak teaches that each item on the diagram have associations within the model and correspond to elements of the report. Belcsak shows associations in a graphical form in figure 15, and Belcsak teaches the user can click on an item and the system shows the user more information about the object, which also includes a menu item that can link the user to the report item as shown in figure 12, where the diagram is on the left and the report is on the right. Belcsak specifically shows the GUI allows the user to create party graphics respectively representing financial parties in a scenario wherein each graphic **connects** two of the party graphics, which in the Examiners opinion is an association (See column 3, lines 45-55). The template is also generated that connects the object in the model to the information presented in the model (See column 3, lines 55-67), which as shown in the drawings (See Figures 6-8) the data is linked to a graphical object. Belcsak expressly teaches the user can move arrows representing parties in a transaction which generate associations in the interface (See column 9, lines 40-67). Finally, Belcsak expressly teaches the **report can be bound** to the model allowing the report to be merged with the graphical model (See column 16, lines 40-45), which provides for a manipulatable interface by the user interacting with the data and the model and if the user can select and move associations and then view the updates on the model then they can see the item in the report corresponding to the selected graphical object.

Belcsak does not expressly teach:

- Associating one or more tags with a graphical object of the graphical model representation
- Associating the one or more tags associated with the graphical object with one or more portions of the produced report corresponding to the graphical object

Belcsak clearly shows associating a graphical object to information presented in a model. The difference between Belcsak and the now claimed invention is the specific recited feature of associating one or more tags with the graphical object and with one or more portions of

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generated report. For this limitation, the teachings of Shaughnessy are relied upon because Shaughnessy teaches a specific mechanism of generating a report where the data in the report is shown as a visual representation rendered in HTML, PDF, XML and other formats. Shaughnessy specifically mentions and shows in figure 6 and column 3, lines 1-27 a template for displaying data where XML tags are used to associate a visual data object to another data item (See column 3, lines 45-55). Shaughnessy also specifically mentions the template contains a event handling mechanism that perform a function when the user selects an element and the system invokes a different part of a document, which is an example of associating one or more sections of a report to an object.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention, having the teachings of Belcsak and Shaughnessy in front of them to modify the system of Belcsak to include the associating tags to a graphical object of the graphical model and also associating the tags to one or more portions of the report for the purposes of linking the object to a tag in a markup language report so that different sections of a report can be linked together and easily navigated to. The motivation to combine Belcsak with Shaughnessy comes from the suggestion in Shaughnessy to use a specification to indicate how to visually display the data in the report and how and how to handle user interactions with the report (See column 1, lines 35-47).

With respect to **dependent claim 2**, Belcsak teaches the method in which the report is a document structured with portions corresponding to different elements of the graphical model representation (column 9, lines 15-30 and column 16, lines 16-50).

With respect to **dependent claim 3**, Belcsak teaches the method in which the document is a structural coverage report (Belcsak column 16, lines 15-50). Belcsak shows the report covers the foundation of the financial model and how it is calculated, which covers how the structure of a financial transaction is executed between two parties.

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With respect to **dependent claim 4**, Belcsak teaches the method in which the document is a code generation report incorporating syntax highlighted code (column 13, lines 5-10). Belcsak teaches the code is generated in a report (See figure 21).

With respect to **dependent claim 5**, Belcsak teaches the method in which the document is a profiling report that documents relative execution times of each of the elements (Belcsak column 10, line 11-45). Belcsak teaches a process of entering the execution time of the financial model, which corresponds, to payments that flow from the parties. The longer the payment period will cause a longer execution time of the lease.

With respect to **dependent claim 7**, Belcsak teaches the method further comprising loading an element in the report in response to activating a graphical object on the graphical model representation and activating with a mouse (column 9, lines 30-67). Belcsak teaches the users can drag-n-drop new elements to be added to the model. The drag operation is performed using an input tool

With respect to **dependent claims 8-9, 18-19** as indicated in the above discussion Belcsak teaches every limitation of claim 1.

Belcsak teaches that the system is a web-based platform, which would provide the structure to have a web page and the elements of the graphical model rendered in a browser. Belcsak also teaches that a report is generated for each of the sections of the model.

Belcsak does not provide a specific example where the individual associations within the reports are markup tags and that the tags are HTML tags. However, these limitations would have been obvious to one of ordinary skill in the art at the time of the invention, in view Shaughnessy, because Shaughnessy teaches the representations are generated and displayed in HTML or XML and relating the XL tags to sections of the report. The motivation to combine Belcsak with Shaughnessy comes from the suggestion from the suggestion in Shaughnessy to use a specification to indicate how to visually display the data in the report and how and how to handle user interactions with the report (See column 1, lines 35-47).

With respect to **dependent claim 10**; Belcsak teaches the method in which the report is a model coverage report (See figure 21 and column 16, lines 15-50). Belcsak teaches the entire model structure is covered in the reports generated by the system (See also column 7, lines 60-67).

In regard to **Claims 12-17, and 21**, claims 12, 14-17, and 21 reflect the system comprising computer readable instructions for performing the steps of method claims 1, 2-5, and 10 respectively, and in further view of the following, are rejected along the same rationale. Belcsak teaches that the elements of the graphical model can be loaded and changed by the user as selected within the interface (See example Figures 15-21). Belcsak also teaches the means within a system for displaying in an interface a graphical model that the user designs and from the model and analysis is run to determine the outcome of a financial transaction. Belcsak teaches that reports are generated that show the different sections of the transaction and the reports show the code in which the model was executed in the interface.

With respect to **dependent claims 11, 20, and 22** as indicated in the above discussion Belcsak teaches every limitation of claim 1.

Belcsak teaches that the system is a web-based platform, which would provide the structure to have a web page and the elements of the graphical model rendered in a browser.

Belcsak also teaches that a report is generated for each of the sections of the model.

Belcsak does not provide a specific example where markup language tags are portable document format (PDF) embedded links and that the report that is generated is a generated code report.

However, this limitation would have been obvious to one of ordinary skill in the art at the time of the invention, in view of Shaughnessy, because Shaughnessy specifically teaches generating a report in PDF format, which would have PDF embedded links (see column 2, lines 45-67).

The examiner notes the support in the specification for the program product on page 6 of the specification.

In regard to **Independent claim 23**, Belcsak teaches the computer program product residing on a computer readable medium having instructions stored thereon which, when executed a processor, cause the processor to:

- Performing an analysis or synthesis operation on a graphical model representation that includes at least one graphical object (See column 2, 55-67 and column 3, lines 1-35).
Belcsak teaches a process of performing an analysis on a graphical model. Belcsak teaches that the graphical representation includes at least one graphical object (See figure 14 and column 9, lines 40-50). A graphical box that is dragged by the user is a graphical object.
- Producing a report from the analysis or synthesis operation (column 7, lines 60-67 and column 16, lines 16-50). Belcsak teaches producing a report from the analysis of the model.
- Receiving a selection of the graphical object in the graphical model representation (See column 9, lines 50-67, a user double click is receiving a selection); displaying elements of the report corresponding to the selected graphical object in response to the selection Belcsak teaches that each item on the diagram have associations within the model and correspond to elements of the report. Belcsak shows associations in a graphical form in figure 15, and Belcsak teaches the user can click on an item and the system shows the user more information about the object, which also includes a menu item that can link the user to the report item as shown in figure 12, where the diagram is on the left and the report is on the right. Belcsak specifically shows the GUI allows the user to create party graphics respectively representing financial parties in a scenario wherein each graphic **connects** two of the party graphics, which in the Examiners opinion is an association (See column 3, lines 45-55). The template is also generated that connects the object in the model to the information presented in the model (See column 3, lines 55-67), which as shown in the drawings (See Figures 6-8) the data is linked to a graphical object. Belcsak expressly teaches the user can move arrows

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representing parties in a transaction which generate associations in the interface (See column 9, lines 40-67). Finally, Belcsak expressly teaches the **report can be bound** to the model allowing the report to be merged with the graphical model (See column 16, lines 40-45), which provides for a manipulatable interface by the user interacting with the data and the model and if the user can select and move associations and then view the updates on the model then they can see the item in the report corresponding to the selected graphical object.

Belcsak does not expressly teach:

- Associating one or more tags with a graphical object of the graphical model representation
- Associating the one or more tags associated with the graphical object with one or more portions of the produced report corresponding to the graphical object

Belcsak clearly shows associating a graphical object to information presented in a model. The difference between Belcsak and the now claimed invention is the specific recited feature of associating one or more tags with the graphical object and with one or more portions of generated report. For this limitation, the teachings of Shaughnessy are relied upon because Shaughnessy teaches a specific mechanism of generating a report where the data in the report is shown as a visual representation rendered in HTML, PDF, XML and other formats. Shaughnessy specifically mentions and shows in figure 6 and column 3, lines 1-27 a template for displaying data where XML tags are used to associate a visual data object to another data item (See column 3, lines 45-55). Shaughnessy also specifically mentions the template contains a event handling mechanism that perform a function when the user selects an element and the system invokes a different part of a document, which is an example of associating one or more sections of a report to an object.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention, having the teachings of Belcsak and Shaughnessy in front of them to modify the system of Belcsak to include the associating tags to a graphical object of the graphical model and also associating the tags to one or more portions of the report for the purposes of linking the

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object to a tag in a markup language report so that different sections of a report can be linked together and easily navigated to. The motivation to combine Belcsak with Shaughnessy comes from the suggestion in Shaughnessy to use a specification to indicate how to visually display the data in the report and how and how to handle user interactions with the report (See column 1, lines 35-47).

A reference to specific paragraphs, columns, pages, or figures in a cited prior art reference is not limited to preferred embodiments or any specific examples. It is well settled that a prior art reference, in its entirety, must be considered for all that it expressly teaches and fairly suggests to one having ordinary skill in the art. Stated differently, a prior art disclosure reading on a limitation of Applicant's claim cannot be ignored on the ground that other embodiments disclosed were instead cited. Therefore, the Examiner's citation to a specific portion of a single prior art reference is not intended to exclusively dictate, but rather, to demonstrate an exemplary disclosure commensurate with the specific limitations being addressed. *In re Heck*, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting *In re Lemelson*, 397 F.2d 1006, 1009, 158 USPQ 275, 277 (CCPA 1968)). *In re: Upsher-Smith Labs. v. Pamlab, LLC*, 412 F.3d 1319, 1323, 75 USPQ2d 1213, 1215 (Fed. Cir. 2005); *In re Fritch*, 972 F.2d 1260, 1264, 23 USPQ2d 1780, 1782 (Fed. Cir. 1992); *Merck & Co. v. Biocraft Labs., Inc.*, 874 F.2d 804, 807, 10 USPQ2d 1843, 1846 (Fed. Cir. 1989); *In re Fracalossi*, 681 F.2d 792, 794 n.1, 215 USPQ 569, 570 n.1 (CCPA 1982); *In re Lamberti*, 545 F.2d 747, 750, 192 USPQ 278, 280 (CCPA 1976); *In re Bozek*, 416 F.2d 1385, 1390, 163 USPQ 545, 549 (CCPA 1969).

Response to Arguments

Applicant's arguments with respect to claims 1-5, 7-23 have been considered but are moot in view of the new ground(s) of rejection as applicant's arguments revolve around the new amended limitations and the Examiner has provided a new reference in the alternative and a rationale for Belcsak.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 6160549 to Touma, which discloses a process of generating a report from a declarative model of graphical objects and running simulation on the configured model.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action.

Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven B. Theriault whose telephone number is (571) 272-5867. The examiner can normally be reached on M, W, F 10:00AM - 8:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on (571) 272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Steven B Theriault/
Patent Examiner
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